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## SOME SUGGESTIONS FOR PREPARING A BUDGET EXHIBIT<sup>1</sup>

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Primarily the function of the budget exhibit is to bring public opinion to support public officials who have visions as to what might be accomplished toward social well-being and to counteract the indifference of the passive many and the selfish interests of an active few who hamper the work of civic progress. The budget exhibit accelerates the forward movement by pointing out graphically the need for municipal improvements and helps communities approach these higher standards by guiding them in the actual work of carrying out the recommendations indicated. Thus the budget exhibit is a potent factor in the social education of the public, the connecting force between the educational agency and those intent upon active civic advance.

An efficient budget exhibit, accordingly, is educational in its nature and shows to the taxpayer such facts as:

A. The work accomplished by the department or bureau asking for money

How much spent last year

How much wanted for the next year

What is to be done, and the reasons for the increase or decrease

B. The cost of such work per unit, with the comparison of the cost of such work in other comparable cities

C. Relative efficiency of the work done as compared with that of other comparable cities

D. Work that might be done effectively and estimate of the cost of such work with a comparison of conditions in other comparable cities

E. Opportunities for saving in the conduct of the city's business by the introduction of scientific management

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<sup>1</sup> It is the purpose in this paper to deal with no phase of the budget exhibit other than the details for charts. For treatment of other phases, see "The Efficiency Value of the Budget Exhibit," *The Annals of the American Academy of Political and Social Science*, May, 1912, page 151; "How New York Views Its Budget Exhibit," the *Twentieth Century Magazine*, November, 1911, page 21; "The Significance of the Dobbs Ferry Idea," *The American City*, August, 1912, page 106.

To avoid confusion, the functional method of display is adopted, with coördinate displays by departments as arranged in the budget, unless the budget is functionalized.

1. General charts for the city as a whole give the area, population and death rates, marriage rates, tax rate, miles of highway, etc., with a comparison of these with another comparable city.

2. The system of government is illustrated by charts showing the general plan of the system and of regular departments and offices.

3. The "cube" scheme for showing budget totals usually is adopted, classifying both by departments and by functions, together with cubes showing the city debt as compared with other comparable cities.

4. The city budget as a whole is shown on two charts. The first is departmentalized as follows:

- General administration
- Fire protection
- Police protection
- Health
- Sewerage
- Garbage
- Sidewalks, cross-walks and parks
- Street lighting
- Street sprinkling
- Assessments and collection of taxes
- Public library
- City court
- Etc.

The second shows the following classifications:

- Salaries and wages
- Repairs and replacements
- Fuel
- Forage
- Shoeing horses
- Telephone
- Light, heat and power
- Water
- Advertising and printing
- General supplies
- Contingencies
- Etc.

5. General administration—Chart showing present expendi-

tures and estimates for next year with increase or decrease, and reasons.

6. Fire protection—The exhibit to show the following charts:

a. Expenses last year and estimate for next year, with increase or decrease as to

Salaries of permanent men  
Salaries of call-men  
Supplies  
Alarm system  
Telephone  
Uniforms  
Apparatus  
Etc.

b. Fires per month for ten years

Number of fires per month per 1,000 population

Number of fires per month per 1,000 population in comparable cities

c. Number of men employed

Permanent

Call

Number of men employed in proportion to population; compare with other cities

d. Property loss through fires for ten years; compare with other cities

e. Equipment of department      Equipment of department in other cities

No. value

Engine houses

Hose

Engines

Etc.

Total Value

No. value

Engine houses

Hose

Engines

Etc.

Total value

f. Increase of property valuation last ten years

Increase of appropriation for fire protection last ten years, with relation to property valuations

7. Police protection exhibit on same lines as above, emphasizing possibility of saving, and showing needs.

8. Health exhibit on lines as above.

9. Sewage exhibit showing:

a. Complete chart of expenses and estimate for next year with increase or decrease

b. Chart of present system and extensions desired, with cost

c. Work accomplished

d. Cost of sewers and operation

e. Cost of different kinds of sewers, pipes, drains, etc.

*f.* Cost of cleaning sewage basins per basin with number cleaned last year, force employed, and number of cubic yards removed per basin with comparison of cost in other cities

*g.* Same for sewers

*h.* Method of disposal of sewage

*i.* Show better method of disposal, etc., and cost of installation of better system of improvements

*j.* Budget appropriation for maintenance of sewers, with number of miles of sewers and appropriation per mile

*k.* Number of employees

# 10. Garbage.

*a.* Complete chart of garbage expenses last year, with estimate of cost for next year, and increase or decrease

*b.* Portions of city covered, with cost per cubic yard of material removed and per capita of population and comparison with comparable city

*c.* Cost of extending to other sections of city

*d.* Methods used and better methods possible, with cost

*e.* Number of employees

*f.* Equipment and value of same

# 11. Sidewalks, cross-walks and parks.

*a.* Complete chart of expenditures and estimate for next year, with increase or decrease

*b.* Map of square yards of new walks laid, with kind of walk and needs for next year

*c.* Repairs made, and the cost per square yard of repairing various kinds of walks

*d.* Cost of cleaning snow per cubic yard for walks, with snow falls in square yards, and cubic yards cleaned and per capita cost. Cost in comparable city

*e.* Number of parks, acreage, and location by map

*f.* Cost of up-keep of parks per acre

*g.* Number of employees

# 12. Street lighting—similar exhibit.

# 13. Street sprinkling—similar exhibit.

# 14. City court.

*a.* Chart of expenditure and estimate for next year, with increase or decrease

*b.* Number of persons held and final disposition during year

*c.* Cases of various sorts for ten years, comparative statement

*d.* Charts classifying persons held by nativity, age, color, marital condition, etc.

*e.* Needs and cost comparisons with other cities

## 15. Finance.

- a.* Charts showing cost of administering finances of city and estimate for next year, with increase or decrease
- b.* Total city debt showing increase for ten years. Total and proportional debts of other comparable cities
- c.* Comparative budget totals for ten years, with estimated total for next year
- d.* Increase in budget compared with increase in population, showing per capita expenditures
- e.* Sinking fund
- f.* Bonds issued last year
- g.* Proposed for bond issues next year

## 16. Assessment and collection of taxes.

- a.* Charts showing cost of assessing and collecting taxes, and estimate for next year with increase or decrease
- b.* Work done in last year
- c.* Income from various taxes and estimate for next year, and per capita rate

In some instances it is desirable to have a more complete exhibit for a particular department. For example, the exhibit for the department of street cleaning shows for a number of years and for comparable periods, the following standard facts.

- A.* Average cleaning cost per thousand square yards cleaned by all methods, all pavements
- B.* Average carting cost per cubic yard of all refuse removed
- C.* Average disposal cost per cubic yard of garbage disposed of
- D.* Average disposal cost per cubic yard of ashes, sweepings, and rubbish disposed of
- E.* Average stable cost per horse day working

But it is desired to go further in the exhibit of this department. Accordingly, such facts as the following are shown:

## 1. Map of city with appended statistics as to

- a.* Population
- b.* Density of population
  - i.* Maximum
  - ii.* Minimum
  - iii.* Average
- c.* Area of city
- d.* Length of streets
  - i.* Paved
  - ii.* Macadamized
  - iii.* Unpaved

*e.* Area of pavements

- i. Rough (Block, cottle, granite)
- ii. Smooth (Asphalt, wood block, brick)
- iii. Macadam (Tarred, oiled, plain)
- iv. Unpaved

2. Organization chart of department.

3. Digest of statutes, charter provisions, city ordinances, health regulations, police regulations and department rules relative to street encumbrances, street cleaning, carting, disposal of refuse, etc.

4. Arrests for violations, with number fined, amount of fines, number of fines, number imprisoned, number discharged.

5. Expenditures for the following:

- a.* Salaries
- b.* Wages
- c.* Apparatus, machinery, vehicles, harness, etc.
- d.* Furniture and fittings
- e.* Repairs and replacements
- f.* Telephone service
- g.* Automobiles, purchase and maintenance
- h.* Horses—purchase
- i.* Horses—maintenance
- j.* General supplies
- k.* Contracts
- Etc.

6. Salaries and wages—Number at each price, number of days, and total paid for each class of labor.

7. Revenues from sale of garbage, trimming dumps, etc.

8. Equipment of each sweeper.

9. Square yards cleaned each day per sweeper, per sweeping machine, per flusher, per flushing machine, per squeegee.

10. Samples of receptacles on streets.

11. Monthly work of department by loads and by cubic yards in carting street sweepings, ashes, garbage, rubbish, snow and ice.

Etc.

These statistics are not required for every city, nor are they available in most cities. They serve to indicate, however, the variety of matter possible to place in the exhibit of a department which is studied intensively.

The budget exhibit, then, shows by means of photographs and

charts how much the city spends each year and what it gets for its money. Expenditures, accounts and annual reports are compared with expenditures for similar purposes in other towns. On the physical side, the best that the city has is compared with the worst that it has, with a view to pointing out what the city needs as to parks, repairing of streets, cleaning of streets, sidewalks, trees, artistic electric light poles, underground electric wires and city planning. Public amusements are compared with provisions made by other towns for playgrounds, entertainment halls, game rooms and public baths. In the matter of health, is set forth what the city does and what other towns do to control the quality of milk, water, ice, foods, plumbing, nuisances, tenements and contagious diseases. Similar figures show school attendance, absences, non-promotion, and elimination, medical and physical inspection and treatment of school children, ventilation, decoration, equipment, ungraded classes for retarded pupils, manual training, domestic science, vocational guidance and wider use of the school plant. In each instance the best things in the city are set forth, thus lauding the city for its accomplishments. Where both good and bad conditions exist, the best are set forth, and alongside are shown the worst, with the question as to whether the best is any too good for all of the city.

In every instance it has proved essential to procure the coöperation of city officials in charge of each of the city departments for which an exhibit is planned. Usually city officials are glad to show the public what they are doing with their appropriations and what they would like to do if they had larger appropriations. The same thing can be done with the private organizations engaged in philanthropy and civic welfare work. In fact, it is profitable to arrange for heads of departments to coöperate with the executives of private agencies in getting up exhibits covering their mutual fields. For instance, the anti-tuberculosis league and the organization in charge of milk stations coöperate with the health officer; the associated charities coöperate with the superintendent of the poor, etc. If each department head will endeavor to show how much money was appropriated at the beginning of his term or at the beginning of the year, how much was expended and what services were rendered for the money spent, a pretty clear picture will be given of the results of that department's activity. Have this tied up to what



the executive would like to have accomplished, and there is the basis for increased public interest.

Throughout the exhibit there are shown photographs. For illustration, at one budget exhibit there were shown such pictures as the following:

1. The best looking house and home site in the village, cost or rent of which was not over a certain specified amount
2. Vistas looking over the surrounding country
3. The first village playground
4. Schoolhouse, closed and not used; with complementary picture showing children playing in the street
5. Aqueduct not used and available for playground
6. Abrupt ending of main street, with complementary picture of monument or fountain in similar location
7. Ugliness of poles and wires on streets, with complementary picture indicating remedy
8. New engine house, a model of its kind

But the strength of the exhibit in attracting the public at large lies in the number of active exhibits or working models. For this purpose the following devices have been useful:

1. Fire department exhibit—real alarms turned in at fire alarm box, and firemen in full regalia spring to their places on fire apparatus
2. Street lighting department—lights flashed to show tests made on arcs
3. Street cleaning department—model of two-storied fire department headquarters building, beside which stands a pile of street sweepings three times as large, indicating comparison of amount of street sweepings removed each year
4. Health department—laboratory showing saving of babies from impure milk
5. Building department—charts, pictures and models showing how to build and how not to build houses or tenements
6. Purchasing department—piles of all kinds of groceries, coal, engineering supplies, etc., purchased by city in one year, with prices on them and gilded cubes indicating amount of each purchase annually. Each cube connected by colored ribbon to central chart containing salient figures and information about the department
7. High-pressure water system—miniature sky-scraper aflame, with a stream from a hydrant, one from an engine, and one from a high-pressure hydrant, contrasted with the 320 feet to which a stream can be raised by a modern high-pressure system
8. Education department—1,000 feet of film show fire drills, etc.
9. Schools—examples of articles made by pupils in vocational training departments, both boys and girls

10. Purchasing department—pictures showing trees growing through machinery and tools cast away in store yards and disorder in store rooms, contrasted with sample shelving and bins for keeping supplies in order, together with perpetual inventory records

11. Health department—dental clinic, examining teeth of school children

12. City laboratory—testing apparatus for determining heat units in coal

13. Model of farm yard well, showing facility with which water is contaminated from barn-yard filth

14. Large bottle with electric light flashing, labeled and designed to show danger of patent medicine

15. Model showing six small dolls in cradles passing across table top into a door marked "Entrance to Second Year," with a seventh small doll covered by a grave and stone before it enters this gateway; indicating graphically the infant death rate.

Limitless ideas suggest themselves to those actively engaged in the preparation of a budget exhibit. For those whose facilities for putting their ideas into practice are limited, there is always available the coöperation of the Educational Exhibition Company, of Providence. A number of the models and devices suggested in the preceding paragraph were designed and made by this company of young men.

Each successive budget exhibit witnesses a broadening of the scope. Early exhibits gave attention to few subjects other than those included strictly within municipal activities. Later social welfare became an important theme in budget exhibits. Then came commerical facts relative to the city, with charts giving such information as the following:

1. Assessed valuation for past ten years
2. Building permits
3. Post office receipts
4. School enrollment, public and private
5. Public library, volumes and circulation
6. Industrial activity, number of factories and number of employees
7. Building and loan associations, total membership, borrowing members, assets
8. Bank capital and surplus
9. Savings deposits
10. Bank loans and discounts
11. Total bank deposits
12. Bank clearings
13. Value of products
14. Capitalization of industries

15. Cost of materials used
16. Value added by manufacture
17. Salaries and wages
18. Miscellaneous expenses
19. Imports and exports
20. Port arrivals and clearances—coastwise, foreign, tonnage

Meanwhile there has been growing up a group of men throughout the United States who have a vision of the intimate relationship between sewers, streets, tunnels, and the administrative and commercial activities of cities. Sewer systems built without provision for community growth required money which should be available for other city needs. In contrast, the telephone companies in most cities have their trunk lines planned and built upon the certainty of future growth. On the one hand, an exorbitant over-tax is laid upon every person living or doing business in the city, with resultant loss in efficiency and waste of funds. On the other hand, a process of conservation brings a potential benefit to every citizen. Consequently, the relationship between city planning and community development and actual administrative efficiency has taken concrete form in a visualization of the principles involved—in the American and Foreign City Planning Exhibition, as it is called, of the American City Bureau.

This city planning exhibition, which has been shown in connection with municipal exhibits, budget exhibits and government expositions in the United States, Canada, and Chili, marks the most recent step in the evolution of the budget exhibit. Beginning with such prosy municipal subjects as sewers, pavements, streets and switching yards, it leads upward to the highest interests of humanity. It is designed graphically to analyze the city into elemental parts, to show their structural relationship and the scientific method of city planning. It is part of the great movement typified by the budget exhibit, a movement which is sweeping across the land and transforming our municipal life. That transformation is to be from waste to economy, from confusion and congestion to order. It means that the great distributive function of our economic life is to be articulated with the other great function, production, in agreement with the dominant principle of the day—efficiency.

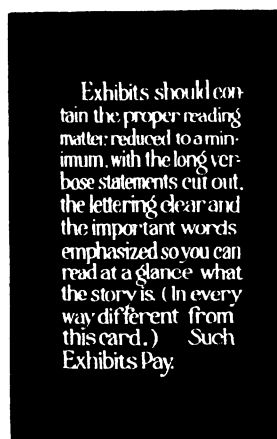
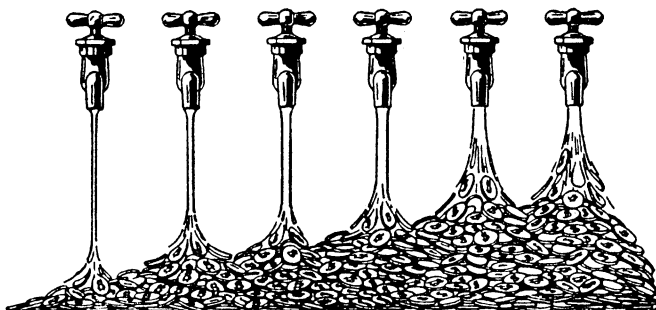


Illustration of difference between two styles of display charts.  
Hold this page at arm's length to see which  
is more readable.

#### A GRAPHIC METHOD OF SHOWING THE MONEY COST OF LEAKY FAUCETS.

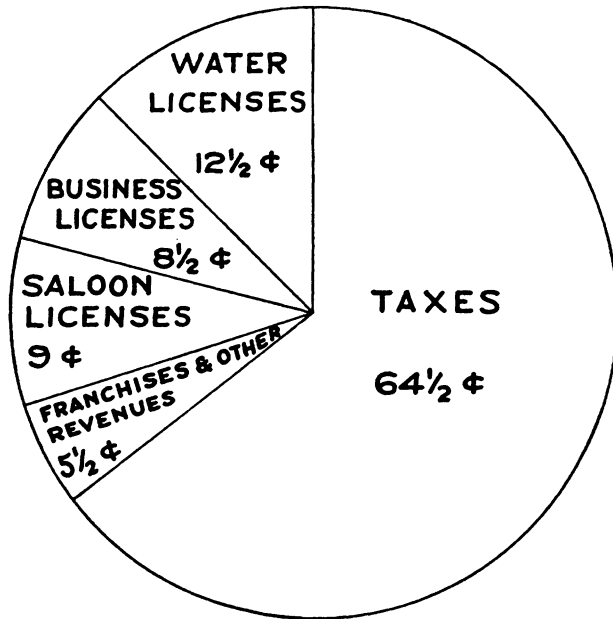


Under Average Water Rates and Pressures This is the Way That Leaks  
Run into Money.

Each 1-64 inch leak wastes 2 gallons per hour and costs	. . .	1c per day
Each 1-32 inch leak wastes 8 gallons per hour and costs	. . .	5c per day
Each 1-16 inch leak wastes 34 gallons per hour and costs	. . .	21c per day
Each 1-8 inch leak wastes 137 gallons per hour and costs	. . .	86c per day
Each 1-4 inch leak wastes 514 gallons per hour and costs	. . .	\$3.21 per day
Each 1-2 inch leak wastes 2057 gallons per hour and costs	. . .	\$12.84 per day

Next, here are all the sources of revenue—from general taxes and special license taxes.

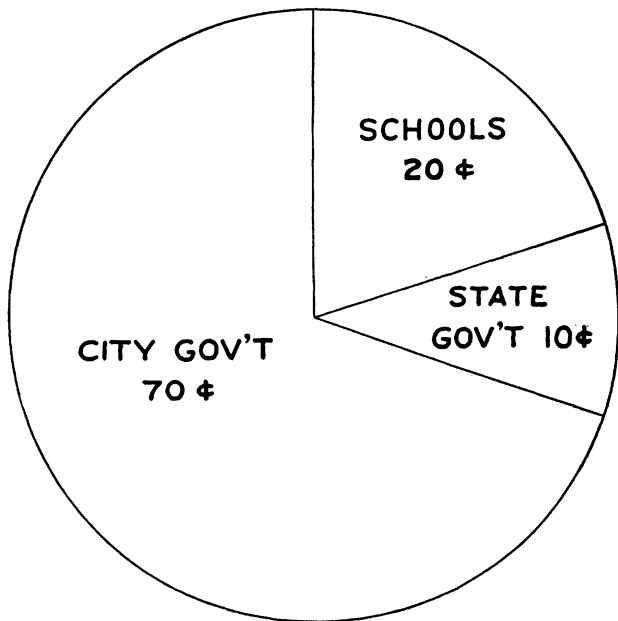
Where every dollar of public revenue collected in St Louis comes from—



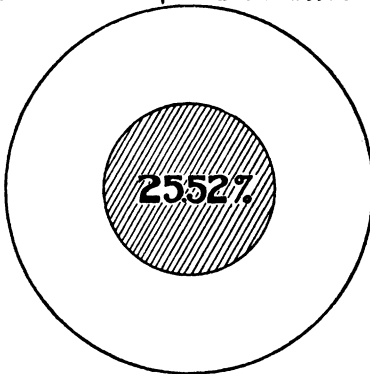
That completes the story of the increased tax rate. There are some significant points in our fiscal system which, however, need attention in connection with an increasing tax rate.

First, let's see how the money is distributed.

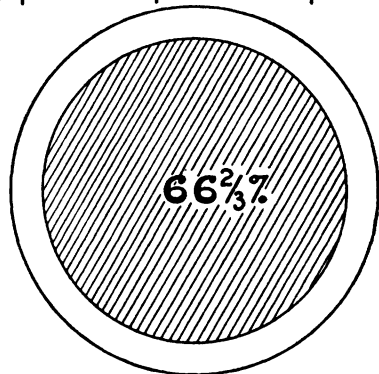
Where every dollar of public revenue collected in St Louis goes to—



One reason why St Louis bears an unfair share of the states expenses.



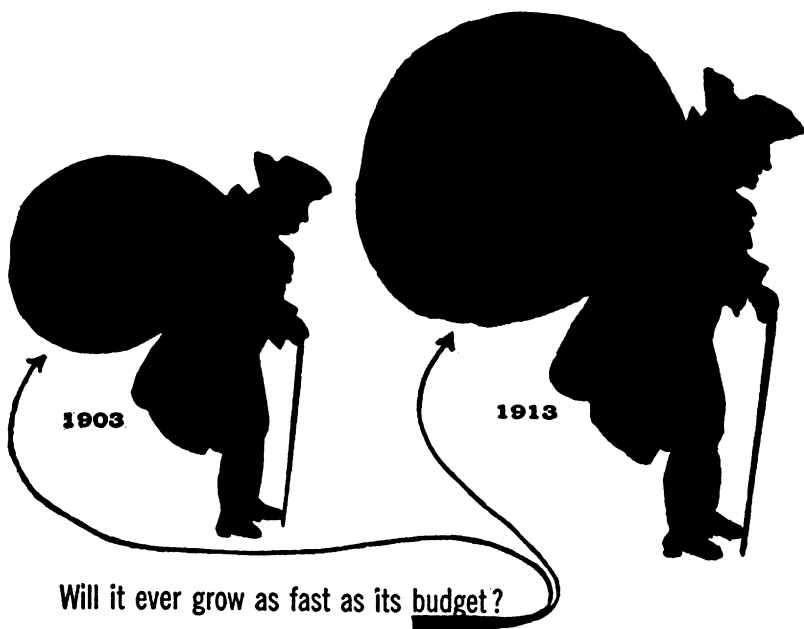
Productive farmlands in Missouri  
(excluding all unproductive lands)  
pay taxes on 25% assessed  
valuation of property.



St. Louis pays taxes on  
 $66\frac{2}{3}\%$  assessed valuation  
of property.

If all property in Missouri were assessed at 66 2-3 per cent of its true value, the state would have plenty of money and St. Louis would not bear an unjust share of the state's burden.

## Our City Will Grow No Matter Who's Elected



From 1903 to 1913 the budget grew  $2\frac{1}{2}$  times faster than the city's population.

A graphic cartoon.